

WHAT IS CLAIMED IS:

1. An information processing apparatus for performing, by a connection to an external server, a process concerning a service provided by the external server,

wherein said information processing apparatus executes person authentication by comparing a template acquired from a person identification certificate storing a template which is person identification data of a user using said information processing apparatus with sampling information input by the user, and performs connection to said external server provided that said person authentication is successfully passed.

2. An information processing apparatus according to Claim 1, wherein said information processing apparatus stores a person identification certificate in a memory provided in said information processing apparatus.

3. An information processing apparatus according to Claim 1, wherein said information processing apparatus holds link information in which a person identification certificate and a public key certificate applied during a process of establishing a connection to said external server are related to each other and stores the person

identification certificate and the public key certificate in a memory provided in said information processing apparatus, and

wherein said information processing apparatus extracts the public key certificate linked to said person identification certificate on the basis of the link information, provided that personal authentication on the basis of said person identification certificate is successfully passed, and performs mutual authentication between said external server and said information processing apparatus by applying the extracted public key certificate.

4. An information processing apparatus according to Claim 1, wherein said information processing apparatus is an apparatus having the function of reproducing contents, said external server is a contents providing server, and said information processing apparatus executes person authentication by comparing the template extracted from said person identification certificate with sampling information input by a user, establishes a connection to the contents providing server providing that said person authentication is successfully passed, and downloads the contents.

5. An information processing apparatus according to Claim 1, wherein said external server is one of a user

registration server and a service registration server which performs any one of processes of user registration, erasure of user registration, and making a service contract to a service providing entity, and

wherein said information processing apparatus executes person authentication by comparing a template extracted from said person identification certificate with sampling information input by a user, establishes a connection to one of said user registration server and the service registration server provided that said person authentication is successfully passed, and transmits necessary data corresponding to any one of said processes of user registration, erasure of user registration, and making a service contract to said user registration server.

6. An information processing apparatus according to Claim 1, wherein said information processing apparatus forms a link in which a person identification certificate and a public key certificate applied during a process of establishing a connection for data communication with a party is related to each other, and stores the link in a storage means thereof.

7. An information processing apparatus according to Claim 1, wherein said information processing apparatus

downloads a person identification certificate applied to person authentication from a person identification certificate authority which is an entity for issuing a person identification certificate and stores the downloaded person identification certificate in a storage means thereof, and

wherein, in a process of downloading said person identification certificate, said information processing apparatus performs mutual authentication between said information processing apparatus and said person identification certificate authority, and downloads the person identification certificate from said person identification certificate authority provided that said mutual authentication is successfully completed.

8. An information processing apparatus according to Claim 1, wherein said information processing apparatus downloads a person identification certificate applied to person authentication from a person identification certificate authority which is an entity for issuing a person identification certificate and stores the downloaded person identification certificate, and

wherein, when there is a public key certificate applicable to a process relating to application of the person identification certificate acquired by downloading,

said information processing apparatus updates link information in which said person identification certificate and said public key certificate are related to each other, and stores said person identification certificate and said public key certificate in a memory provided in said information processing apparatus.

9. An information processing apparatus according to Claim 1, wherein said information processing apparatus downloads a public key certificate from a certificate authority which is an entity for issuing a public key certificate and stores the downloaded public key certificate in a storage means thereof, and

wherein, in a process of downloading said public key certificate, said information processing apparatus performs mutual authentication between said information processing apparatus and said certificate authority, and downloads said public key certificate from said certificate authority provided that said mutual authentication is successfully completed.

10. An information processing apparatus according to Claim 1, wherein said information processing apparatus downloads a public key certificate from a certificate authority which is an entity for issuing a public key

certificate and stores the downloaded public key certificate in a storage means thereof, and

wherein, when there is a person identification certificate applicable to a process relating to application of the public key certificate acquired by downloading, said information processing apparatus updates link information in which said person identification certificate and said public key certificate are related to each other, and stores said person identification certificate and said public key certificate in a memory provided in said information processing apparatus.

11. An information processing apparatus according to Claim 1, wherein said information processing apparatus includes an encryption processing unit, and, in data transmission/reception between said information processing apparatus and said external server, performs mutual authentication between said information processing apparatus and said external server and further, a data transmitting end adds a digital data to the transmitted data and a data receiving end verifies the digital signature.

12. An information processing apparatus according to Claim 1, wherein said template is composed of any one of biometric information of a person such as fingerprint

information, retina pattern information, iris pattern information, voice print information, and handwriting information; non-biometric information such as a seal, a passport, a driver's license, and a card; any combination of two or more of said biometric information and said non-biometric information; and a combination of any of said information and a password.

13. An information processing method for performing, by a connection to an external server, a process concerning a service provided by the external server, said method comprising the steps of:

executing person authentication by comparing a template acquired from a person identification certificate storing a template which is person identification data of a user using an information processing apparatus with sampling information input by the user; and

performing a connection to said external server provided that said person authentication is successfully passed.

14. An information processing method according to Claim 13, further comprising the steps of:

storing a person identification certificate in a memory provided in said information processing apparatus; and

executing a process by reading the stored person identification certificate during executing personal authentication.

15. An information processing method according to Claim 13, wherein said information processing apparatus holds link information in which a person identification certificate and a public key certificate applied during a process of establishing a connection to said external server are related to each other and stores the person identification certificate and the public key certificate in a memory provided in said information processing apparatus, and

wherein said information processing apparatus extracts the public key certificate linked to said person identification certificate on the basis of the link information, provided that personal authentication on the basis of said person identification certificate is successfully passed, and performs mutual authentication between said external server and said information processing apparatus by applying the extracted public key certificate.

16. An information processing method according to Claim 13, wherein said information processing apparatus is an apparatus having the function of reproducing contents,

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said external server is a contents providing server, and said information processing apparatus executes person authentication by comparing the template extracted from said person identification certificate with sampling information input by a user, establishes a connection to the contents providing server providing that said person authentication is successfully passed, and downloads the contents.

17. An information processing method according to Claim 13, wherein said external server is one of a user registration server and a service registration server which performs any one of processes of user registration, erasure of user registration, and making a service contract to a service providing entity, and

wherein said information processing apparatus executes person authentication by comparing a template extracted from said person identification certificate with sampling information input by a user, establishes a connection to one of said user registration server and the service registration server provided that said person authentication is successfully passed, and transmits necessary data corresponding to any one of said processes of user registration, erasure of user registration, and making a service contract to said user registration server.

18. An information processing method according to Claim 13, wherein said information processing apparatus forms a link in which a person identification certificate and a public key certificate applied during a process of establishing a connection for data communication with a party is related to each other, and stores the link in a storage means thereof.

19. An information processing method according to Claim 13, further comprising the steps of:

downloading a person identification certificate applied to person authentication from a person identification certificate authority which is an entity for issuing a person identification certificate to store the downloaded person identification certificate in a storage means thereof;

performing, in a process of downloading said person identification certificate, mutual authentication between said information processing apparatus and said person identification certificate authority; and

downloading the person identification certificate from said person identification certificate authority provided that said mutual authentication is successfully completed.

20. An information processing method according to

Claim 13, further comprising the steps of:

downloading a person identification certificate applied to person authentication from a person identification certificate authority, which is an entity for issuing a person identification certificate, to store the downloaded person identification certificate; and

updating, when there is a public key certificate applicable to a process relating to application of the person identification certificate acquired by downloading, link information, in which said person identification certificate and said public key certificate are related to each other, to store said person identification certificate and said public key certificate in a memory provided in said information processing apparatus.

21. An information processing apparatus according to Claim 13, further comprising the steps of:

downloading a public key certificate from a certificate authority, which is an entity for issuing a public key certificate, to store the downloaded public key certificate in a storage means thereof;

performing, in a process of downloading said public key certificate, mutual authentication between said information processing apparatus and said certificate authority; and

downloading said public key certificate from said

certificate authority provided that said mutual authentication is successfully completed.

22. An information processing method according to Claim 13, further comprising the steps of:

downloading a public key certificate from a certificate authority, which is an entity for issuing a public key certificate, to store the downloaded public key certificate in a storage means thereof; and

updating, when there is a person identification certificate applicable to a process relating to application of the public key certificate acquired by downloading, link information, in which said person identification certificate and said public key certificate are related to each other, to store said person identification certificate and said public key certificate in a memory provided in said information processing apparatus.

23. An information processing method according to Claim 13, wherein, in data transmission/reception between said information processing apparatus and said external server, said information processing apparatus performs mutual authentication between said information processing apparatus and said external server and further, a data transmitting end adds a digital data to the transmitted data

and a data receiving end verifies the digital signature.

24. A program providing medium for providing a computer program which executes, on a computer system, information processing for performing, by a connection to an external server, a process concerning a service provided by the external server, said computer program comprising the steps of:

executing person authentication by comparing a template acquired from a person identification certificate storing a template which is person identification data of a user using an information processing apparatus with sampling information input by the user; and

performing a connection to said external server provided that said person authentication is successfully passed.